

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A wireless communications device, comprising:

a communication sensitivity checking portion of the wireless communications device configured to check a sensitivity of at least one communications channel used to communicate with an external access point and to provide a sensitivity signal based on the checked sensitivity; and

a power mode changing portion of the wireless communications device configured to receive the sensitivity signal from the communication sensitivity checking portion and to change a power mode of the wireless communications device between a working mode and at least one sleep mode based on the sensitivity signal received from the communication sensitivity checking portion, wherein the power mode changing portion is configured to switch the power mode into the working mode once a predetermined time period elapses after the power mode has been switched to the at least one sleep mode, and wherein a length of the predetermined time period varies based on a value of a predefined sensitivity value.

2. (Currently Amended) The device of claim 1, wherein the power mode changing portion is configured to change the power mode of the wireless communications device into the working mode if the sensitivity signal indicates that the communications sensitivity is greater

than a predefined reference value, and wherein the power mode changing portion is configured to change the power mode of the wireless communications device into the at least one sleep mode if the sensitivity signal indicates that the communications sensitivity is less than ~~a~~the predefined sensitivity value.

3. (Previously Presented) The device of claim 2, wherein the predefined sensitivity value can be changed by a user.

4. (Previously Presented) The device of claim 2, wherein when the wireless communications device is in the sleep mode, both a transmission portion and a receive portion of the wireless communications device are put in a power down mode.

5-6. (Canceled)

7. (Previously Presented) The device of claim 1, further comprising a data checking portion configured to determine whether data needs to be transmitted to the external access point and configured to output a data check signal, and wherein the power mode changing portion is also configured to change the power mode of the wireless communications device based on the data check signal.

8. (Previously Presented) The device of claim 7, wherein the power changing mode portion is configured to change the power mode of the wireless communications device into a transmission sleep mode if the data check signal indicates that there is no data to be transmitted, and wherein the power changing mode portion is configured to change the power mode of the wireless communications device into the working mode if the data check signal indicates that there is data to be transmitted.

9. (Previously Presented) The device of claim 8, wherein the at least one sleep mode includes a transmission sleep mode, and when the wireless communications device is in the transmission sleep mode, only a transmission portion of wireless communications device is in a power down mode.

10. (Previously Presented) The device of claim 1, wherein the wireless communication device comprises a wireless local area network (LAN) module.

11. (Currently Amended) A wireless LAN module, comprising:

 checking means for checking a communication sensitivity of at least one communications channel;

 switching means for switching a power mode of the wireless LAN module to a power down mode if the checking means determines that a communication sensitivity is less than a predefined sensitivity value, and wherein the switching means is also configured to switch the power mode of the wireless LAN module to a normal mode after a predetermined delay period elapses after the power mode has been set to the power down mode, wherein if the checking means determines that the communications sensitivity is less than a first predetermined sensitivity value, the switching means switches the power mode of the wireless LAN module to a normal mode after a first predetermined delay period elapses after the power mode has been set to the power down mode, and wherein if the checking means determines that the communications sensitivity is less than a second predetermined sensitivity value, the switching means switches the power mode of the wireless LAN module to the normal mode after a second predetermined delay period elapses after the power mode has been set to the power down mode.

12. (Previously Presented) The module of claim 11, wherein the predefined sensitivity value is approximately 70 percent.

13. (Previously Presented) The module of claim 11, wherein the switching means is configured such that if the checked communication sensitivity is more than the predefined

sensitivity value, a power mode of a transmission block of the wireless LAN module is set to the power down mode if no data needs to be transmitted by the wireless LAN module.

14. (Canceled)

15. (Previously Presented) A power management method of a wireless local area network (LAN) module, comprising:

setting up a communications channel of a wireless LAN network;
checking a communications sensitivity of the set channel;
changing a power mode of the wireless LAN module to a sleep mode if a result of the checking indicates that the communications sensitivity is less than a predetermined sensitivity value; and

changing a power mode of the wireless LAN module back to a working mode after a predetermined delay period expires after the wireless LAN module is set to the sleep mode, wherein if the result of the checking indicates that the communications sensitivity is less than a first predetermined sensitivity value, the power mode of the wireless LAN module is changed back to the working mode after a first predetermined delay period expires, and wherein if the result of the checking indicates that the communications sensitivity is less than a second predetermined sensitivity value, the power mode of the wireless LAN module is changed back to the working mode after a second predetermined delay period expires.

16-17. (Canceled)

18. (Previously Presented) The method of claim 15, wherein if the result of the checking indicates that the communications sensitivity is greater than the predetermined sensitivity value, the method further comprises:

 checking to determine if data must be transmitted by the wireless LAN module; and

 changing the power mode of a transmission block of the wireless LAN module to the sleep mode if a result of the checking indicates that no data must be transmitted.

19. (Currently Amended) A method of setting up a wireless LAN module to achieve power savings, comprising:

 attempting to set up a wireless communications channel;
 checking to determine if the channel was properly set up;
 changing a power mode of the wireless LAN module to a power down mode if a result of the checking indicates that the channel was not properly set up; and

 changing the power mode of the wireless LAN module to a normal mode after a predetermined delay period expires after the power mode of the wireless LAN module is set to the power down mode, wherein if a communications channel is not successfully set up after a predetermined number of setup attempts are made, the method further comprises:

changing the power mode of the wireless LAN module to the power down mode, and

changing the power mode of the wireless LAN module to a normal mode after a second predetermined delay period expires after the power mode of the wireless LAN module is set to the power down mode, wherein the second predetermined delay period is longer than the first predetermined delay period used after an unsuccessful setup attempt.

20-25. (Canceled)